

Title (en)

RC devices, organic dielectric laminates and printed wiring boards incorporating such devices, and methods of making thereof

Title (de)

RC Vorrichtungen, organische dielektrische Lamine und Leiterplatten dergleichen Vorrichtungen umfassend, und Verfahren um diese herzustellen

Title (fr)

Dispositifs RC, laminés diélectriques organiques et circuits imprimés incorporant de tels dispositifs, et méthodes pour les fabriquer

Publication

EP 1651017 A3 20060503 (EN)

Application

EP 05020898 A 20050926

Priority

US 96754104 A 20041018

Abstract (en)

[origin: EP1651017A2] A capacitive/resistive device (200) provides both resistive and capacitive functions. The device comprises a first electrode (210); a dielectric (220) disposed over the first electrode; a resistor element (230) formed on an adjacent to the dielectric; a conductive trace (245); and a second electrode (240) disposed over the dielectric and in electrical contact with the resistor element, wherein the dielectric is disposed between the first electrode and the second electrode and wherein said dielectric comprises an unfilled polymer of dielectric constant less than 40. The capacitive/resistive device may be embedded within a layer of a printed wiring board (2000). Embedding the capacitive/resistive device conserves board surface real estate, and reduces the number of solder connections, thereby increasing reliability.

IPC 8 full level

H01G 4/40 (2006.01); **H05K 1/16** (2006.01)

CPC (source: EP KR US)

H05K 1/16 (2013.01 - KR); **H05K 1/162** (2013.01 - EP US); **H05K 1/167** (2013.01 - EP US); **H05K 3/429** (2013.01 - EP US); **H05K 2201/0154** (2013.01 - EP US); **H05K 2201/0355** (2013.01 - EP US); **H05K 2201/09309** (2013.01 - EP US); **H05K 2201/09672** (2013.01 - EP US); **H05K 2201/09763** (2013.01 - EP US); **H05K 2203/0361** (2013.01 - EP US); **H05K 2203/1461** (2013.01 - EP US); **Y10T 29/435** (2015.01 - EP US)

Citation (search report)

- [XY] US 6278356 B1 20010821 - LIN WEN-YEN [TW], et al
- [XY] US 4302737 A 19811124 - KAUSCHE HELMOLD, et al
- [A] US 6600645 B1 20030729 - LAUF ROBERT J [US], et al
- [Y] EP 0836229 A2 19980415 - GEN ELECTRIC [US]
- [Y] US 5731747 A 19980324 - VAN DE WALLE GERJAN F A [NL], et al
- [Y] EP 0409668 A2 19910123 - OMRON TATEISI ELECTRONICS CO [JP]
- [Y] US 6285542 B1 20010904 - KENNEDY III ROBERT M [US], et al

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)

EP 1651017 A2 20060426; **EP 1651017 A3 20060503**; **EP 1651017 B1 20070801**; CN 1783379 A 20060607; DE 602005001826 D1 20070913; DE 602005001826 T2 20080424; JP 2006121086 A 20060511; KR 100677787 B1 20070202; KR 20060054031 A 20060522; TW 200635454 A 20061001; TW I402008 B 20130711; US 2006082980 A1 20060420; US 2008297274 A1 20081204; US 7430128 B2 20080930; US 7813141 B2 20101012

DOCDB simple family (application)

EP 05020898 A 20050926; CN 200510116108 A 20051018; DE 602005001826 T 20050926; JP 2005303550 A 20051018; KR 20050097350 A 20051017; TW 94134606 A 20051004; US 18827108 A 20080808; US 96754104 A 20041018